

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**AMG Vanadium, Inc.
60790 Southgate Road
Cambridge, Ohio 43725**

ATTENTION:

**Erik Simms
Environmental Manager**

Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring AMG Vanadium, Inc. (AMG or you) to submit certain information about the facility located at 60790 Southgate Road, Cambridge, Ohio ("the facility"). Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B specifies the information that you must submit. You must send this information to us within 30 calendar days after you receive this request.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Air and Radiation Division, Region 5.

AMG owns and operates emission sources at the Cambridge, Ohio facility. We are requesting this information to determine whether your emission sources are complying with the Ohio State Implementation Plan and the CAA.

AMG must send all required information to:

Attn: Compliance Tracker, AE-17J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

AMG must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1341.

As explained more fully in Appendix C, you may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice. You should be aware, moreover, that pursuant to Section 114(c) of the CAA and 40 C.F.R. § 2.301(a) and (f), emissions data, standards and limitations are not entitled to confidential treatment and shall be made available to the public notwithstanding any assertion of a business confidentiality claim. Appendix C provides additional information regarding the meaning and scope of the term "emissions data."

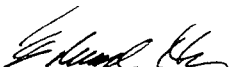
This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject AMG to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Alexandra Letuchy at (312) 886-6035 or at Letuchy.alexandra@epa.gov.

6/1/16
Date


Edward Nam
Acting Director
Air and Radiation Division

Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

Instructions

1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.
2. Precede each answer with the number of the question to which it corresponds and at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.
3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.
4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.
6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

Electronic Submissions

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.
2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel or Lotus format, and not in image format. If Excel or Lotus formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

3. Provide the submission on physical media such as compact disk, flash drive or similar item.
4. Provide a table of contents for each disk or drive so that each document can be accurately identified in relation to your response to a specific question. We recommend the use of electronic file folders organized by question number. In addition, each compact disk or flash drive should be labeled appropriately (*e.g.*, Company Name, Disk 1 of 4 for Information Request Response, Date of Response).
5. Documents claimed as confidential business information (CBI) must be submitted on separate disks/drives apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI. Please follow the instructions in Appendix C for designating information as CBI.
6. Certify that the attached files have been scanned for viruses and indicate what program was used.

Definitions

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq.*

1. The terms “document” and “documents” shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a form useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any documents.
2. The terms “relate to” or “pertain to” (or any form thereof) shall mean constituting, reflecting, representing, supporting, contradicting, referring to, stating, describing, recording, noting, embodying, containing, mentioning, studying, analyzing, discussing, evaluating or relevant to.

Appendix B

Information You Are Required to Submit to EPA

AMG must submit the following information for its facility located at 60790 Southgate Road Cambridge, Ohio ("the facility") pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a), within 30 calendar days of its receipt of this letter.

1. Provide a copy of each current air permit issued to the facility by the Ohio Environmental Protection Agency (OEPA), including, but not limited to, construction permits, federally enforceable state operating permits (FESOPs), and Part 70 (Title V) Operating Permits.
2. Provide a copy of all air permit applications submitted to OEPA since April 2006.
3. Provide a copy of all previous, final air permits issued by OEPA to the facility since April 2006.
4. Provide a table listing each emission unit, exhaust point, and associated emission control, if applicable. In the table, include all fugitive emission exhaust points. Additionally, provide an aerial view photograph or diagram of the facility indicating the location of each emission unit and each of the exhaust points.
5. Provide a table of all emissions tests conducted at the facility for any reason, from April 2006 to the present, and provide copies of all emissions test reports. Also, provide the last set of emissions tests conducted on Roaster No. 1. Emission testing includes, but is not limited to, compliance testing, engineering testing, and testing for general information. Use the following guidelines for compiling the table and preparing copies of the stack test reports:
 - a. **Table:** Identify the emissions unit, the control device, the date of the test, the federal or state regulation requiring the test (if applicable), pollutants tested, throughput during test, and the test method(s) used. For each test during which the source was not operating at maximum design capacity, provide an explanation for why production was limited. Indicate whether the report was shared with OEPA.
 - b. **Copies:** Provide full stack test reports, including the summary pages, the section describing the process parameters and production or processing rates at the time of the test, all test runs, and all calculations.
6. Provide copies of any deviation, excess emissions reports, or startup, shutdown, and malfunction reports for the facility submitted to OEPA or EPA since May 2011.
7. Provide copies of all other quarterly reports, semi-annual compliance reports, annual compliance certifications, or equivalent documents for the facility (not accounted for in Question 6) submitted to either OEPA or EPA since May 2011.

8. Provide copies of all annual emissions reports submitted to OEPA for the facility from 2001 to the present, and include:
 - a. A narrative describing the method used for the annual emissions calculations for each pollutant, including the basis of any emissions factors used;
 - b. Any documents outlining procedures for calculating annual emissions; and
 - c. A table describing the assumed/estimated capture efficiencies for each control device(s) and the associated emission unit(s), including any associated documentation used in developing the capture efficiencies. Include a description of any changes to capture efficiency since May 2001 and any associated documentation.
9. Provide all documents, related to all studies, inspections, or evaluations conducted or attempted for any reason from May 2001 to the present, of existing or additional air pollution control equipment and control systems at the facility, including, but not limited to:
 - a. System improvements implemented based on findings of any study, inspection, or evaluation;
 - b. Modeling emissions of air pollutants to the atmosphere;
 - c. Ventilation of any emission units at the facility, including, but not limited to the electric arc furnaces (EAFs), the roasters, crushing, screening, grinding, milling, and material handling;
 - d. Capture and collection of pollutants emitted by electric arc furnaces (EAFs), the roasters, crushing, screening, grinding, milling, and material handling;
 - e. Performance of the baghouse-ventilation-and-control system (including volumetric flow measurements and static pressure measurements); and
 - f. Commissioning reports.
10. Provide a description of the baghouse ventilation-and-control system associated with the electric arc furnaces (EAFs) and the baghouse/scrubber ventilation-and-control system associated with the roasters. Include answers to the following questions in your description.
 - a. When were the baghouse ventilation-and-control systems installed?
 - b. Is each baghouse positive or negative pressure?
 - c. Does each baghouse have a single-stack or multi-stacks?
 - d. Is each baghouse modular?

- e. Baghouse type (e.g., pulse jet);
 - f. Fabric filter material used and manufacturer specifications;
 - g. Baghouse capacity;
 - h. Fan type, fan capacity, fan speed during operation, and fan curve. For fan speed, include reference documents used to determine the required fan speed;
 - i. Air to cloth ratio;
 - j. Scrubber type;
 - k. Scrubbing liquor;
 - l. Scrubber key design parameters;
 - m. Scrubber manufacturer specifications;
 - n. Dates of installation of all improvements and modifications; and
 - o. Diagrams of how each emission unit is connected to a capture and control system, including a diagrams of any capture mechanism.
11. Provide the following records regarding baghouse ventilation-and-control system associated with the electric arc furnaces (EAFs) and the baghouse/scrubber ventilation-and-control system associated with the roasters from May 2011 to the present:
- a. Differential pressure readings taken at the baghouse in an Excel Workbook or other compatible format, including the date and time of the readings, and the operating status of associated emission units;
 - b. Operating limits for the differential pressure, the method used to establish the values, and the effective date of these operating limits, including:
 - i. Copies of any manufacturer manuals used to determine operating limits for differential pressure operating range, with reference to where the operating parameters for the baghouse are defined in the manual;
 - ii. Copies of any performance tests used to determine operating limits for differential pressure operating range;
 - c. Copies of all completed inspection logs;
 - d. Copies of all completed maintenance and repair logs; and
 - e. Copies of the manufacturer operating and maintenance manual and baghouse and scrubber maintenance plans.

12. Provide all EPA Method 9 visual opacity readings, EPA Method 22 visual emissions readings, or all other visible emission observations conducted from May 2011 to the present. The records should state the emission unit, and control device and/or stack, if applicable. Abnormal emissions observations should be accompanied by records of the reasonable steps taken in response to the emissions.
13. Provide the following information for the EAFs for all times that the emission units were operating during the period of May 2004 to the present. Provide this information in an Excel Workbook or compatible format:
 - a. Monthly production in tons, including tons per twelve consecutive-month periods;
 - b. Monthly average tap-to-tap cycle time;
 - c. Monthly average production rate (tons/hour);
 - d. Dates of installation of all improvements and modifications; and
 - e. Baghouse dust collected in tons per month from the EAF Baghouse.
14. Provide the following information for the Roaster No. 1 and Roaster No. 2 for all times that the emission units were operating during the period of May 2001 to the present. Provide this information in an Excel Workbook or compatible format:
 - a. Monthly throughput in tons, including tons per twelve consecutive-month periods;
 - b. Monthly average production rate (tons/hour);
 - c. Dates of installation of all improvements and modifications;
 - d. Baghouse dust collected in tons per month from the baghouse controlling emissions from the roasters;
 - e. Total SO₂ emissions for each calendar month (lbs/month) based on the CEMS data; and
 - f. The total operating time of the SO₂ CEMS for each calendar month while the emissions unit was in operation.
15. Provide the following information for the EAFs:
 - a. Dimensions of the furnaces, including the dimensions of the molten metal when fully charged (feet), and background documents used as a basis for this information;
 - b. An annotated diagram indicating the dimensions of the hood(s) for each corresponding furnaces (feet), indicate which hoods are used during each portion of the melt cycle and whether hoods have side walls from the top of the molten metal to the hood face;

- c. The hood capacity for each furnace (cubic feet), the associated calculation, and any background documents used as a basis for this calculation;
 - d. Average duration of charging, back charging, melting, and tapping for each furnace, and associated information on how this was determined;
 - e. Distance from the top of the molten metal in each furnace to the face of each hood (feet); and
 - f. Temperature of molten metal in each furnace during charging, back charging, melting, and tapping (degrees F).
16. From May 2011 to the present, provide the results of all indoor air quality tests performed at the facility. For each test result of area sampling, provide an annotated diagram of the facility identifying the location from which the sample is obtained. For each test result of personnel sampling, provide an annotated diagram of the facility indicating location where the employee works and a narrative description their job duties.
 17. Identify and describe, in a chronologically organized table, all capital expenditures greater than \$25,000 commenced at the emission units and process equipment at the facility, from May 1, 2011, to the present. This list must contain the approximate date each project (including maintenance projects and modifications) commenced, the date each project was completed or implemented, a brief description of each project, a list of expenses for each project, and the fixed capital cost of each project in nominal dollars. This should include, but not be limited to capital expenditures associated with changes in fuel type, fuel feed operations, raw material feed rates, production rates, emission rates, and/or air pollution control equipment.
 18. For each project identified in Item 17, above, that costs more than \$50,000 and for projects related to the installation of Roaster No. 2 and modifications to the shell height of EAF no. 1, provide copies of all capital appropriation requests, financial justifications, and authorizations, including attachments and addenda, generated by or prepared on behalf of the facility or its predecessors concerning that project.
 19. Provide complete copies of all written correspondence, determinations, documents, or communications with OEPA from May 2011, to the present, concerning the applicability of the Prevention of Significant Deterioration and/or non-attainment New Source Review requirements to the construction and/or modification of any equipment at the facility.
 20. For the projects related to the installation of Roaster No. 2 and modifications to the shell height of EAF no. 1, provide copies of all documents related to the applicability of New Source Performance Standards, New Source Review, and/or Prevention of Significant Deterioration to the project.
 21. For the time period May 2011 to the present, provide all records generated pursuant to 40 C.F.R. § 52.21(r)(6).

Appendix C

Confidential Business and Personal Privacy Information

Assertion Requirements

You may assert a business confidentiality claim covering any parts of the information requested in the attached Appendix B, as provided in 40 C.F.R. § 2.203(b).

Emission data provided under Section 114 of the CAA, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2.

“Emission data” means, with reference to any source of emissions of any substance into the air:

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. § 2.301(a)(2)(i)(A),(B) and (C).

To make a confidentiality claim, submit the requested information and indicate that you are making a claim of confidentiality. Any document for which you make a claim of confidentiality should be marked by attaching a cover sheet stamped or typed with a caption or other suitable form of notice to indicate the intent to claim confidentiality. The stamped or typed caption or other suitable form of notice should employ language such as “trade secret” or “proprietary” or “company confidential” and indicate a date, if any, when the information should no longer be treated as confidential. Information covered by such a claim will be disclosed by EPA only to the extent permitted and by means of the procedures set forth at Section 114(c) of the CAA and 40 C.F.R Part 2. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified. EPA will construe the failure to furnish a confidentiality claim with your response to the Request to Provide Information as a waiver of that claim, and the information may be made available to the public without further notice to you.

Determining Whether the Information is Entitled to Confidential Treatment

All confidentiality claims are subject to EPA verification and must be made in accordance with 40 C.F.R. § 2.208, which provides in part that you must satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; that the information is not and has not been reasonably obtainable by legitimate means without your consent and that disclosure of the information is likely to cause substantial harm to your business's competitive position.

Pursuant to 40 C.F.R. Part 2, Subpart B, EPA may at any time send you a letter asking that you support your confidential business information (CBI) claim. If you receive such a letter, you must respond within the number of days specified by EPA. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information. If you receive such a letter, EPA will ask you to specify which portions of the information you consider confidential **by page, paragraph, and sentence**. Any information not specifically identified as subject to a confidentiality claim may be disclosed to the requestor without further notice to you. For each item or class of information that you identify as being CBI, EPA will ask that you answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, *e.g.*, until a certain date, until the occurrence of a special event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question number 1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available databases, promotional publications, annual reports or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, **explain with specificity** why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial and the causal relationship between

disclosure and such harmful effects. How could your competitors make use of this information to your detriment?

7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to EPA of similar information in the future.
8. Is there any other information you deem relevant to EPA's determination regarding your claim of business confidentiality?

If you receive a request for a substantiation letter from the EPA, **you bear the burden of substantiating your confidentiality claim.** Conclusory allegations will be given little or no weight in the determination. In substantiating your CBI claim(s), you must bracket all text so claimed and mark it "CBI." Information so designated will be disclosed by EPA only to the extent allowed by and by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

Personal Privacy Information

Please segregate any personnel, medical and similar files from your responses and include that information on a separate sheet(s) marked as "Personal Privacy Information." Disclosure of such information to the general public may constitute an invasion of privacy.

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Request to Provide

Information Pursuant to the Clean Air Act by Certified Mail, Return Receipt Requested, to:

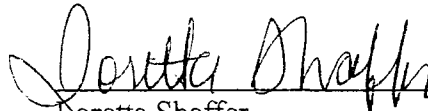
Erik Simms, Environmental Manager
AMG Vanadium, Inc.
60790 Southgate Road
Cambridge, Ohio 43725

I also certify that I sent a copy of the Request to Provide Information Pursuant to the
Clean Air Act by First-Class Mail to:

Melissa Witherspoon, APC Manager
Southeast District Office
melissa.withererspoon@epa.ohio.gov

Robert Hodanbosi, APC Division Chief
Ohio EPA - DAPC
Bob.hodanbosi@epa.ohio.gov

On the 3 day of June 2016.



Loretta Shaffer
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER:

7009 1680 0000 7673 8552